

# SG50 Series

## High Current Winding Resistance Meter



High performance is the key feature of these high current resistance meters based on the four point measuring technique. The instruments are especially designed and optimized for low resistance measurements in highly inductive circuits. The design responds to the needs of utilities and transformer manufacturers for a lightweight, portable unit with high accuracy and ease of operation.

The instruments are capable to measure the resistance of up to three serial windings simultaneously. The test object temperature is measured and resistance readings are automatic temperature compensated for copper and aluminum windings using a standard or customized reference temperature.

An intrinsically safe discharge circuit dissipates the stored magnetic energy rapidly after the test. The discharge process is continuously monitored and clear indicators show when it is safe to remove the test leads.

Complete field test reports can be generated on an optional printer. The report can also be sent over a **RS-232C** interface to a common PC or notebook. For factory use the system can be remote controlled by a host computer.

### Feature

- Fully automated resistance measurement of virtually any size and type of windings
- Resist arc. reliably of protection circuit is strong
- Unmatched speed, range and accuracy make these instruments the perfect tools for cost-effective and reliable maintenance measurements.
- Safety discharge circuit feature proofs and indicates the rapid discharge process to avoid any damage of personnel, test equipment and instrument
- Highest charging power guarantees fast saturation of even the largest power transformers within shortest time
- The data automatically print per 30 seconds
- Data storage of up to 2000 measurements
- Single/Double/Three channels measure at the same time
- Match the conversion software of temperature rise. the value of temperature rise can handle automatically
- Audio discharging warning, direct clearly, cut down the mistake operation

### Applications

- ◆ Power Transformers
- ◆ Distribution Transformers
- ◆ Instrument Transformers
- ◆ Rotating Machines
- ◆ Bushings
- ◆ Cables
- ◆ Circuit Breakers

## Technical Specification

	SG5008	SG5007
Channel	1	1
Output current	40A、20A、10A	20A、10A、5A
Output voltage	40V	
Range	100 $\mu\Omega$ ~1 $\Omega$ (40A)	200 $\mu\Omega$ ~2 $\Omega$ (20A)
	200 $\mu\Omega$ ~2 $\Omega$ (20A)	400 $\mu\Omega$ ~4 $\Omega$ (10A)
	400 $\mu\Omega$ ~4 $\Omega$ (10A)	800 $\mu\Omega$ ~8 $\Omega$ (5A)
Accuracy	0.2%	
Resolution	0.1 $\mu\Omega$	
Winding measured	Y, $\Delta$ or mixed	
Working environment	Power supply: AC220V $\pm$ 10% , 50Hz/60Hz Working temperature: 0~40 $^{\circ}$ C Environment humidity: $\leq$ 90%RH no forming dew	
Dimension	530mm(L) $\times$ 440mm(W) $\times$ 180mm(H)	
Weight	17kg	

	SG5008T	SG5007T
Channel	3	3
Output current	40A、20A、10A	20A、10A、5A
Output voltage	40V	
Range	100 $\mu\Omega$ ~1 $\Omega$ (40A)	200 $\mu\Omega$ ~2 $\Omega$ (20A)
	200 $\mu\Omega$ ~2 $\Omega$ (20A)	400 $\mu\Omega$ ~4 $\Omega$ (10A)
	400 $\mu\Omega$ ~4 $\Omega$ (10A)	800 $\mu\Omega$ ~8 $\Omega$ (5A)
Accuracy	0.2%	
Resolution	0.1 $\mu\Omega$	
Winding measured	Y, $\Delta$ or mixed	
Working environment	Power supply: AC220V $\pm$ 10% , 50Hz/60Hz Working temperature: 0~40 $^{\circ}$ C Environment humidity: $\leq$ 90%RH no forming dew	
Dimension	530mm(L) $\times$ 440mm(W) $\times$ 180mm(H)	
Weight	40kg	

	SG5002	SG5003
Channel	1	1
Output current	10A、5A、1A、10mA、below10mA	5A、1A、100mA、below10mA
Range	0.2mΩ~20KΩ	1mΩ~20kΩ
Accuracy	0.2%±2μΩ	
Resolution	0.1μΩ	
Winding measured	Y, Δ or mixed	
Working environment	Power supply: AC220V±10% , 50Hz/60Hz Working temperature: 0~40℃ Environment humidity: ≤90%RH no forming dew	
Dimension	395mm(L) ×240mm(W) ×250mm(H)	
Weight	10kg	

	SG5002T	SG5003T
Channel	3	3
Output current	10A、5A、1A、10mA、below10mA	5A、1A、100mA、below10mA
Range	0.2mΩ~20KΩ	1mΩ~20kΩ
Accuracy	0.2%±2μΩ	
Resolution	0.1μΩ	
Winding measured	Y, Δ or mixed	
Working environment	Power supply: AC220V±10% , 50Hz/60Hz Working temperature: 0~40℃ Environment humidity: ≤90%RH no forming dew	
Dimension	530mm(L) ×440mm(W) ×180mm(H)	
Weight	19kg	

**For further information please contact:**

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